

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-8 (canceled).

Claim 9 (new): A switching power supply device comprising:

a transformer including a primary winding, a secondary winding, and a feedback winding;

a first switching element connected in series to the primary winding;

a control circuit provided between a control terminal of the first switching element and the feedback winding;

a rectifier circuit connected to the secondary winding; and

an output voltage control circuit arranged to detect an output voltage output from the rectifier circuit and feed back the output voltage to the control circuit through a single system; wherein

the control circuit includes an on-period control circuit arranged to turn off the first switching element in an on-state based on a feedback signal transmitted from the output voltage control circuit through the single system under non-light load, and an off-period control circuit arranged to control an off-period of the first switching element by delaying turn-on of the first switching element based on the feedback signal under light load.

Claim 10 (new): The switching power supply device according to Claim 9, further comprising an impedance circuit arranged to connect the off-period control circuit to the on-period control circuit, the impedance thereof changing based on the feedback signal, wherein control of the off-period control circuit under light load and control of the on-period control circuit under non-light load are sequentially performed in accordance with a change in the impedance of the impedance circuit.

Claim 11 (new): The switching power supply device according to Claim 10, wherein the on-period control circuit includes a second switching element provided between the control terminal of the first switching element and the ground and a time constant circuit including a capacitor arranged to apply a control voltage to the second switching element, the off-period control circuit includes a third switching element provided between the control terminal of the first switching element and the feedback winding and a fourth switching element provided between a control terminal of the third switching element and a ground, and the impedance circuit includes a first path for feeding a current generated by the feedback signal to the capacitor and a second path serving as a bypass for feeding the current to the ground.

Claim 12 (new): The switching power supply device according to Claim 9, wherein a minimum on-period is set in the on-period controlled by the on-period control circuit.

Claim 13 (new): The switching power supply device according to Claim 12, wherein the impedance circuit is provided with a clamp circuit arranged to control a voltage of the capacitor in the on-period control circuit for determining the control voltage of the second switching element at a predetermined value when the first switching element is in an off-state.

Claim 14 (new): The switching power supply device according to Claim 11, wherein the second path is a bypass circuit arranged to feed the current generated by the feedback signal only when the first switching element is in an off-state.

Claim 15 (new): The switching power supply device according to Claim 9, wherein the off-period control circuit includes a limit circuit arranged to set an upper limit of a voltage applied to the control terminal of the first switching element.

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Claim 16 (new): An electronic apparatus comprising a power supply circuit unit including the switching power supply device according to Claim 9.